



UNITED STATES PATENT AND TRADEMARK OFFICE

Handwritten initials

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/047,446	01/14/2002	Max Copperman	1546.015US1	1061

21186 7590 03/20/2006
 SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH
 1600 TCF TOWER
 121 SOUTH EIGHT STREET
 MINNEAPOLIS, MN 55402

EXAMINER

ABEL JALIL, NEVEEN

ART UNIT PAPER NUMBER

2165

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/047,446

Applicant(s)

COPPERMAN ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 February 2006.
- 2a) This action is **FINAL**.
- 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-11, 25-31 and 36-42 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-11, 25-31, and 36-42 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some *
 - c) None of:
 - 1. Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____.
 - 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 28-February -2006 has been entered.

2. The amendment filed on 28-February -2006 has been received and entered. Claims 12-24, 32-35, and 43-61 have been cancelled. Therefore, claims 1-11, 25-31, and 36-42 are now pending.

Claim Objections

3. Claims 1-11, 25-31, and 36-42 are objected to because of the following informalities:

For example, claim 1, recite "a user query including language without any definition or reference given to what is meant by "language". Is it meant to be "Query protocol language" or "natural language" or "simple text"? It is not clear what "language" is referencing. Appropriate correction is required. Claims 25, and 31 have similar recitation.

The Independent claims (i.e. 1, 10, 25, 30, and 36) recite an "if" statement which suggest optionally, passive recitation. If the Applicant intended to have the remaining limitations after

Art Unit: 2165

the “if” statement to be considered fully and given complete patentable weight. The “if” recitation should be changed to recite more firm and definite language (i.e. wherein). Since “if” statement is optional, the remaining limitation does not necessarily have to happen (i.e. the presentation of document). Appropriate correction is required.

Due to the optionally suggested in Independent claims 1, 25, and 31, all remaining dependent claims focusing their recitation on the occurrence of the “if” statement are not considered to be further narrowing the scope of the claim.

Claims 3, 4, 26, and 27 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 1 recite the conditional “presenting to the end-user, if the ...”, which in the case where there is no match would omit steps recited in final paragraph of claim 1 including “presenting to the user....at least one indication of at least one document associated with the at least one matched concept”. “A claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be constructed to incorporate by reference all the limitations of the claim to which it refers” (See 35 U.S.C. 112 fourth paragraph) since claims 3, and 4 are dependent on claim 1 which recites steps that can be omitted, they are not proper dependent claims.

Independent claims 25, and 31 have similar language. Claims 6, and 27 are dependent on claim 25, and therefore carry the same deficiency.

Claim 25, line 6, recite, "includes as evidence" without clearly defining what is meant by "evidence". This language is vague and indefinite and adds not functionality to the claim.

Claim 36 has similar recitation. Clarification is required.

Claim 9 is objected to because of the following informalities: Claim 9, line 2 recite the word "that" twice. One should be deleted. Appropriate correction is required.

Claim 1 recites "a concept" in line 11. However, "a concept" was initially introduced in the claim earlier in line 5, is this a new concept that is being introduced or the same original concept? There is insufficient antecedent basis for this limitation in the claim. Similarly, claims 25, and 36 carry the same deficiency. Correction is required.

Similarly, claims 3, and 4, recite the limitation "at least one indication of at least one document" which was previously introduced in Independent claim 1, line 12. There is insufficient antecedent basis for this limitation in the claim. Correction is required.

Similarly, claims 26, and 27, recite the limitation "at least one indication of at least one document" which was previously introduced in Independent claim 25, line 17. There is insufficient antecedent basis for this limitation in the claim. Correction is required.

Claim 2 recites "at least one indication of the at least one matched concept" in line 2. However, "at least one indication" was initially introduced in the Independent claim 1, in line 12,

Art Unit: 2165

of which claim 2 depends, is this a new indication that is being introduced or the same original indication of the matched concept? There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites "at least one indication of the matched concept" in line 2. However, "at least one indication" was initially introduced in the dependent claim 4, in line 4, of which claim 5 depends, is this a new indication that is being introduced or the same original indication of the matched concept? There is insufficient antecedent basis for this limitation in the claim.

Similarly, claims 5, and 8 have similar language. Clarification is required.

Claim 28 recites "at least one indication of at least one related concept" in line 2. However, "at least one indication" was initially introduced in the independent claim 25, in line 11, of which claim 28 depends, is this a new indication that is being introduced or the same original indication of the matched concept? There is insufficient antecedent basis for this limitation in the claim.

Claim 9 recites "at least one end-user" in line 3. However, "at least one end-user" was initially introduced in the independent claim 1, preamble, of which claim 9 depends, is this a new indication that is being introduced or the same original indication of the matched concept? There is insufficient antecedent basis for this limitation in the claim.

Similarly, claims 29, and 30 have similar language. Correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 25, and 36, are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 11, 25, 31, 36, and 42 are not statutory because they merely recite a number of computing steps without producing any tangible result and/or being limited to a practical application. The use of a computer has not been indicated.

These claims do not indicate use of hardware on which the software runs to perform the steps recited in the body of the claim. Software or program can be stored on a medium and/or executed by a computer. In other words the software must be computer-readable. Furthermore, there is no hardware or storage tied to the claimed steps in order to realize their functionality.

6. Claims 11, 31, and 42 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 11, 31, and 42 are not limited to tangible embodiments. In view of Applicant's disclosure, specification paragraph 0033 and paragraph 0288, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., floppy disks, hard drives, CD-ROM or DVD media or any other read-write or read-only memory device) and intangible embodiments (e.g., transmission or display devices). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

To overcome this type of 101 rejection the claims need to be amended to include only the physical computer media and not a transmission media or other intangible or non-functional media. For the instant specification, carrier medium and transmission media would be not statutory but storage media would be statutory.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-11, 25-28, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Foulger et al. (U.S. Patent No. 6,578,022 B1).

As to claim 1, Foulger et al. discloses a method of steering an end-user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See Figure 4A, 412, receiving search query);

determining whether at least one feature in the user query language substantially matches at least concept feature associated with a concept in a plurality of concepts in a knowledge map that are regrouped into a plurality of groups (See column 21, lines 11-18, also see column 21, lines 23-24, wherein “plurality of groups” reads on “plurality of concepts”), and in which each

concept includes at least one concept feature that is also in at least one document in a plurality of documents that are tagged to one or more of the concepts in the knowledge map, and in which each document that includes a concept feature is mapped to the concept that includes the concept feature (See column 22, lines 3-7); and

presenting to the end-user, if the at least one feature in the user query language substantially matches the at least one concept feature associated with a concept (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept), at least one indication of at least one document associated with the at least one matched concept (See column 21, lines 9-11).

As to claim 2, Foulger et al. discloses further including presenting to the user at least one indication of the at least one matched concept (See column 7, lines 55-60).

As to claim 3, Foulger et al. discloses further including:

presenting to the user at least one indication of at least one related concept to the at least one matched concept (See column 4, lines 5-12, wherein “related concept” reads on “suggestion space” tied to the matched concept);

receiving from the user a selection of at least one related concept (See column 3, lines 29-35, wherein “related concept” is found from the “suggested space”); and

presenting to the user at least one indication of at least one document associated with the user-selected related concept (See column 3, lines 50-52, wherein “document” reads on “search results” data).

As to claims 4, and 27, Foulger et al. discloses in which the presenting to the user at least one indication of at least one document associated with the user-selected related concept includes presenting to the user the at least one indication of the at least one document associated with both the user-selected related concept and the at least one matched concept (See column 4, lines 5-12, wherein “related concept” reads on “suggestion space” tied to the matched concept).

As to claim 5, Foulger et al. discloses further including presenting to the user at least one indication of the at least one matched concept (See column 7, lines 55-60).

As to claim 6, Foulger et al. discloses in which the presenting to the user at least one indication of the at least one matched concept and the presenting to the user at least one related concept to the at least one matched concept (See column 4, lines 5-12) includes presenting to the user a paired indication of:

(1) a matched concept, and (2) a corresponding related concept (See column 7, lines 6-22, also see Figure 4B, flowchart, shows that matched results (base results) can be refined as well as reconcile with suggested “related” results).

As to claim 7, Foulger et al. discloses further including ranking related concepts (See Figure 6, shows related resulted ranked by relevance to original search query).

As to claim 8, Foulger et al. discloses in which the presenting to the end-user at least one indication of at least one related concept to the at least one matched concept includes presenting to the end-user ranked indications of related concepts (See Figure 6, shows related resulted ranked by relevance to original search query).

As to claims 9, and 29, Foulger et al. discloses in which the ranking related concepts includes ranking using a number of times that that the related concept was previously-selected by at least one end-user (See column 7, lines 46-54).

As to claims 10, and 30, Foulger et al. discloses further including promoting a related concept in the ranking if a previous selection by an end-user resulted in an inferred success in returning at least one relevant document (See column 7, lines 41-44).

As to claim 11, Foulger et al. discloses a computer-readable medium for performing the method of claim 1 (See claim 1 rejection above).

As to claim 25, Foulger et al. discloses a method of steering an end-user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See Figure 4A, 412, receiving search query);

determining whether at least one feature in the user query language substantially matches at least concept feature of at least one concept in a plurality of concepts in a knowledge map that are pregrouped into a plurality of groups, each concept including as evidence at least one concept feature (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept);

presenting to the end-user, if the at least one feature in the user query language substantially matches the at least one concept feature associated with a concept, at least one indication of the at least one matched concept and at least one related concept to the at least one matched concept, the at least one related concept determined from a predefined correspondence relationship between the at least one matched concept and the at least one related concept, the indication of the at least one related concept presented as corresponding to the at least one matched concept to which it is related (See column 6, lines 16-29, also see column 22, lines 3-7, also see column 22, lines 43-60); and

presenting to the end-user, if the at least one feature in the user query language substantially matches the at least one concept feature associated with a concept (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature

and concept), at least one indication of at least one document associated with the at least one matched concept, the at least one document drawn from a plurality of documents that are respectively linked to one or more of the concepts in the knowledge map (See column 21, lines 9-11, also see column 22, lines 43-54).

As to claim 26, Foulger et al. discloses receiving from the end-user a selection of at least one related concept (See column 8, lines 35-42, and see column 22, lines 36-40; and

presenting to the end-user at least one indication of at least one document associated with the at least one end-user-selected related concept (See Figure 6, shows relevance of concepts, also see column 21, lines 9-15, wherein “presenting” reads on “menu” and “submenu” and suggestions being displayed to end-user).

As to claim 28, Foulger et al. discloses including ranking related concepts, and in which the presenting to the end-user at least one indication of at least one related concept to the at least one matched concept includes presenting to the end-user ranked indication of related competes (See Figure 6, shows relevance of concepts, also see column 8, lines 35-42, and see column 22, lines 36-40).

As to claim 31, Foulger et al. discloses a computer-readable medium for performing the method of claim 25 (See claim 25 rejection).

Art Unit: 2165

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 36-42 are being rejected under 35 U.S.C.103 (a) as being obvious over Foulger et al. (U.S. Patent No. 6,578,022 B1).

As to claim 36, Foulger et al. discloses a method of steering a user to a document needed by the end-user, the method including:

receiving from the end-user a user query including language (See Figure 4A, 412, receiving search query);

determining whether at least one feature in the user query language substantially matches at least one concept feature associated with a concept (See column 114, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept) in a plurality of concepts in a knowledge map that are pre-grouped into a plurality of primary groups, each concept including as evidence at least one concept feature that is also in at least one document in a plurality of documents that are tagged to one or more of the concepts in the knowledge map (See column 3, lines 27-35, wherein “knowledge map” reads on “taxonomy structure presented to the user of the knowledge base”, also see column 3, lines 61-67, wherein “tagged” reads on linked to suggestions made by the knowledge expert as being related);

Art Unit: 2165

presenting to the end-user, if the at least one feature in the user query language substantially matches the at least one concept feature associated with a concept (See column 14, lines 46-52, wherein “determining” reads on “return results” based on the search input, and wherein “at least one feature” reads on “parameter”, and wherein “concept” reads on “node” node, also see column 10, lines 4-14, and see column 2, lines 38-49, gives an example of feature and concept):

at least one indication of at least one related concept to the at least one matched concept (See column 3, lines 61-67, wherein “tagged” relationships reads on “suggested” by the knowledge expert as being related, also see column 9, lines 1-9); and

at least one indication of at least one document associated with the at least one matched concept (See Figure 6, shows an indication of relevance of matched concept (i.e. category)).

Foulger et al. teaches the claimed invention expect for in which the primary groups include an Activities group, a Symptoms group, a Products group, and an Objects group.

Foulger et al. does not explicitly teach the subject heading for each primary group as listed in the claim (but teaches it to be user defined), however he teaches user assigned primary search groups/dimensions/ categories (See column 19, lines 44-51, teaches different groups of related search categories/dimensions, also see column 20, lines 48-49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to assign different headings to primary concept groups since it is known in the database art that concept groups are user definable (non-functional descriptive material does not add functionality to the claim and any type of content can be stored and defined in a knowledge base).

As to claim 37, Foulger et al. as modified discloses in which the related concept is obtained from a derived group mapping relationships between primary group concept nodes from the same or different primary groups (See column 19, lines 44-51, teaches different groups of related search categories/dimensions, also see column 20, lines 48-49).

As to claim 38, Foulger et al. as modified discloses further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of:**

an Activities and Objects group, including at least one relationship between an Activities concept and an Objects concept (See Figure 7B, shows defined primary groups/categories and related sub-groups/categories);

an Activities and Products group, including at least one relationship between an Activities concept and a Products concept;

a Symptoms and Objects group, including at least one relationship between a Symptoms concept and an Objects concept;

a Symptoms and Products group, including at least one relationship between a Symptoms concept and a Products concept; and

a Symptoms and Activities group, including at least one relationship between a Symptoms concept and an Activities concept.

As to claim 39, Foulger et al. as modified discloses further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of:**

an Activities and Activities group, including at least one relationship between different Activities concepts (See Figure 7B, shows defined primary groups/categories and related sub-groups/categories);

an Objects and Objects group, including at least one relationship between different Objects concepts;

a Symptoms and Symptoms group, including at least one relationship between different Symptoms concepts; and

a Products and Products group, including at least one relationship between different Products concepts.

As to claim 40, Foulger et al. as modified discloses further including obtaining a related concept to the at least one matched concept from a derived group that includes **at least one of:**

at least one lexically-similar group, including at least one relationship between lexically similar concepts (See column 20, lines 56-58); and

at least one semantically-similar group, including at least one relationship between semantically similar concepts.

As to claim 41, Foulger et al. as modified discloses in which the primary groups consist only of Products, Activities, Symptoms, and Objects groups.

As to claim 42, Foulger et al. as modified discloses a computer-readable medium for performing the method of claim 36 (See claim 36 rejection above).

Response to Arguments

11. Applicant's arguments with respect to claims 1-11, 25-31, and 36-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Copperman et al. (U.S. Patent No. 6,711,585) teaches end-user guidance in results retrieval.

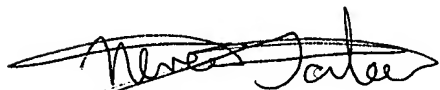
Pooser et al. (U.S. Patent No. 5,812,134) teaches user interface navigation aid.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2165

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



~~Neveen Abel-Jalil~~

March 14, 2006